ABSTRACT OF THE DISCLOSURE

Industrial equipment is monitored by at least one industrial controller assigned to each group of industrial equipment. A plurality of queues is established by logic within one of the industrial controllers for each group. Each queue holds a number of event records. Logic is established in each industrial controller for detecting a predetermined event and for storing an indication of the detected event associated with a time stamp as an event record in a queue associated with the predetermined event. A group computer is interconnected with each industrial controller in the group through a data communication network. A scan rate is established for each queue in that group. Event records are periodically read from each queue based on the scan rate for that queue. The event records for all queues in a group are accumulated by the group computer and forwarded to a server. The group computer may dynamically set the scan rate and/or the queue length for each queue based on records read from the queue.